

D ELDEN BECK (1906-1967)

Vasco M. Tanner¹

D Elden Beck, the son of Mitchel Robertson and Ruth Davis Beck, was born at Spanish Fork, Utah, April 11, 1906, and died August 9, 1967 at Provo, Utah. He married May 31, 1933, Florence Robinson, of Provo, Utah. Four children were born to this couple: Janet (Mrs. Jon G. Clark); Brent Robinson; Linda (Mrs. R. Brent Bullough) all of Provo, and Larry Robinson of Magna, Utah. Professor Beck's father was a descendant from John Forsyth Beck who came to Utah in 1850 from Freehold Township, Buck County, Pennsylvania. His mother was the daughter of Charles Augustas Davis who emigrated from Boston, Massachusetts, to Utah in 1849. Elden's parents were married in 1904 and resided in Spanish Fork and environs until 1914 when for economic reasons, they moved to McGill, Nevada, where his father was employed at the mines. Young Beck began his grade school work there. Life in a mining camp was new and different. In his boy scout activities, he mingled with youngsters from families of many nationalities. He with his pals explored the region round-about engaging in boyish pranks, camping, target practicing, collecting insects, rocks, plants, pine nuts, and animals.

As World War I ended, mining operations dropped off and the Beck family was numbered among the many to leave McGill in 1921. The move took them to Lava Hot Springs, Idaho, where they engaged in road construction work and farming. Here they were in a new environment for the fifteen-year-old lad who was beginning to manifest an interest in nature. The meadows, Portneuf River, and hot mineral springs were new and challenging conditions to him. He often remarked that Roscoe E. Davis, a teacher in the high school at Lava Hot Springs, was an inspiration to him. They went into the fields together collecting plants, animals, and rocks, but above all, Davis encouraged Elden to continue his education after graduation from high school.

When Beck graduated from the Lava Hot Springs High School in 1925, he began preparation to enter the Brigham Young University. In his freshman year he elected to take courses in chemistry and general zoology which gave him an introduction to the sciences. Due to lack of funds, he lived in Spanish Fork with his grandmother Matley (on his mother's side), and commuted each day on the electric interurban train, a distance of 12 miles. In his sophomore year, he batched in Provo with Fred Rowland, a classmate and chum from Lava Hot Springs, until January when due to the death of his grandfather Davis in Spanish Fork, he decided to help his grandmother by staying with her and commuted to Provo. At the University, he

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D Elden Beck, entomologist, invertebrate zoologist,
Brigham Young University, 1938-1967.

had become deeply interested in entomology. He arrived early at the laboratory and was one of the last to leave at night. Laboratory life was still in the tradition of close contact between teacher and student, and the activities of teaching and research were still so closely allied that intellectual relations struck root deeply. At any rate, the teachers and students with whom Elden Beck worked in this period of his career had a powerful influence in bringing out his latent possibilities and ripening his inclination toward natural history. Such classmates as Clarence Cottam, C. J. D. Brown, Irvin

Rasmussen, C. Lynn Hayward, W. Thalman Hasler, Allen Rowe, and Wilford Olsen continued their graduate studies and all have been awarded Ph.D. degrees in zoology or entomology. During Elden's first year at the University, his social and athletic activities were neglected. To compensate for this, he enlisted and served for three years in the Medical Corps of the National Guard.

In the summer of 1928, Beck was chosen to participate in the third biology field expedition. A group of five—Fred Richan, Elden Beck, Orlin Biddulph, advanced biology students, under the direction of Drs. Vasco M. Tanner and Walter P. Cottam, spent six weeks in field survey and collecting in southern Idaho, and along the Utah-Nevada state line to the St. George region. Beck enjoyed this very much as he was an excellent collector and field student. During his senior and graduate years, he was a laboratory instructor in general zoology. In 1929 he was awarded the Bachelor of Arts degree and in 1930 a Master of Arts degree in zoology and entomology. His outlook on life was enlarged when in the spring of 1930 he was granted a research assistantship in entomology at Iowa State College, Ames, Iowa. The next three years were spent in graduate study with Drs. Drake, Wellhouse, Harris, Knight and Richardson. Elden also had the following Utah student friends with whom he associated at Ames: Francis Mortenson, Arvil Stark, Ara Call, Quinten Anderson, Delbert Greenwood, and staff members Drs. C. Y. Cannon and Rudger Walker.

During most of the summer vacation in 1931, Beck and Ara Call collected insects in Kansas, Oklahoma, New Mexico, Northern Mexico from El Paso to Casas Grandes, Magdalena, and Nogales. This collection was shared with the entomologists at Iowa State College and Brigham Young University.

The year 1933 was important in the life of D E. Beck. In the spring of the year he was appointed head of the Biology Department at Dixie College; he and Florence Robinson were married on May 31; and in June he was awarded the Ph.D. degree.

Beck finished his class work and thesis—*A Morphological Study of the Male Genitalia of Various Genera of Bees* and was graduated with a Ph.D. degree from the Department of Entomology at Iowa State College (now Iowa State University) in June 1933. This same year he was appointed head of the Department of Biology at Dixie College, St. George, Utah. This position was made vacant by the death of Dr. William Harrison, a Brigham Young University alumnus, who had recently graduated from Iowa State College, with a Ph.D. degree in biology; Dr. Harrison was a very good teacher and community worker. President Joseph K. Nicholes of the college was anxious to fill this position with an equally promising candidate.

Dr. Beck soon ingratiated himself with the students and the people of the community. He went to considerable effort to take his students on field trips in order that he might lead them into a first-hand acquaintance with the flora and fauna of the St. George area. His trip into Mexico in 1931 so fascinated him that he ventured again in the summer of 1934 to spend six weeks collecting in North-

ern Sonora as well as on the plateau area around Mexico City. This collecting party consisted of his wife Florence and a student, Floyd Atkin. Their bounteous collection of insects and reptiles was used to great advantage in teaching.

Elden's artistic and helpful wife, Florence, while studying art with Mr. Ralph Huntman, artist at the college, persuaded him to try landscape painting which resulted in his interest in painting and the organization in 1934 of a Fine Arts Festival at the college, which has continued to the present time.

An opportunity to return to his alma mater, the Brigham Young University, as assistant professor of zoology and entomology was embraced in 1938. Dr. Beck's addition to the zoology staff was welcomed since he added impetus to field biology study, development of an enlarged program in invertebrate zoology, and research. In 1942, he wrote a laboratory guide for general zoology now in the 4th edition (Burgess Publishing Company).

World War II beckoned Dr. Beck to volunteer and serve in the Medical Entomological Service. His first assignment was at Camp Barkley, Abilene, Texas. (April 1943 - July 4, 1943) for basic training at the Medical Replacement Training Center. On July 4, 1943, he was transferred to Fort McPherson and Fort Benning, Georgia, for mosquito survey and control work. Here he remained until December 11, 1943, when he was again transferred this time to Camp Ellis, Illinois. At this camp a malaria survey unit was organized with Lieutenant Beck in command. On January 14, 1944, he left for Camp Plauche near New Orleans, Louisiana, to receive training preparatory to going over seas. He set sail from San Francisco April 20, 1944, arriving in Guadalcanal, Solomon Islands, on May 19, 1944. During the year of continental service, Lieutenant Beck made valuable collections of insects, amphibians, and reptiles in Texas, Georgia, and Louisiana, which he sent back to the University at Provo.

Collecting had long been a passion with Dr. Beck. During the twelve months—May 19, 1944 to May 22, 1945—spent on Guadalcanal, aside from the duties as director of mosquito control activities at the 20th Station Hospital on the Tenaru River where he distinguished himself in this capacity, he did considerable collecting of insects and reptiles. He not only collected several hundred frogs, lizards, and snakes, but he made a large general collection of most of the insect orders. These specimens were so well prepared for shipping that very little loss resulted from breakage and damage. All the collecting was done within a radius of five miles of the hospital. This area is in the low, sloping plains consisting of swamps, grasslands, and jungles. All of the specimens collected by him were sent to the Brigham Young University where the writer, with student help, spent much time pinning, labeling, and preserving the thousands of specimens he collected.² Dr. Beck not only worked

2. Vasco M. Tanner, 1948. *Pacific Islands Herpetology* No. 1. - Mariana Islands. *Great Basin Naturalist*, Vol. IX, Nos. 1-2, pp. 1-20. 1951. *Pacific Islands Herpetology*, No. V - Guadalcanal, Solomon Islands: A Check List of Species. Vol. XI, Nos. 3-4, pp. 53-86.

hard as a collector but he directed the efforts of many students in that war area in their collecting and shipping of specimens to the Brigham Young University. Some of the University alumni members who cooperated with Dr. Beck in this project were Ernest Reimschuessel, Doyle Taylor, Cluff Hopla, and Herbert Frost. Weevils of the tribe Celeuthetini he collected have served as a nucleus for a critical study of the species of five genera found in the Solomon Islands.

On May 22, 1945, Captain Beck (Lieutenant Beck was promoted to Captain in February 1945) returned to the United States, and arrived in San Francisco on June 19, 1945. From here he was sent to Camp Carson General Hospital in Colorado where he received medical care until October 10, 1945, when he was honorably discharged to return to his wife and family. Florence, his faithful and efficient wife, and four children had, with the help of members of her family and friends, carried on in a stoic manner. Her worries, loneliness, and heartfelt anxiety for Elden's safety and whole return were gallantly borne.

The experience gained in mosquito control methods during the war was put to good use by Dr. Beck. He was assigned by the Utah County Commission and Health Department in 1946-47 to develop a mosquito control program for Utah County. He was also active in civic affairs serving as President of the Provo Junior Chamber of Commerce. For his service he was awarded the distinguished service award by this organization in 1947. He was also editor of the Provo, Utah, Centennial Souvenir 1849-1949.

In 1951-52 Elden was granted a sabbatical leave from the University for the purpose of doing research work at the American Museum of Natural History, New York City. Here his contact with Libby Hyman, great authority on invertebrate zoology, was invaluable. Several months were also spent at Lake Placid, Florida, where he became acquainted with Dr. James G. Needham. A first edition of an invertebrate zoology laboratory guide was finished at this time. A second and third edition of this manual with Dr. Lee Braithwaite as co-author has been widely adopted by more than 200 colleges and universities of the United States.

Dr. Beck began making a collection of earthworms about 1948, since he was aware of the lack of in depth knowledge of the earthworms fauna of the western United States. He sent his collection of these worms to the American Museum of Natural History, New York City. Dr. G. E. Gates, University of Maine, Orono, Maine, authority on earthworms of the United States, graciously decided to study Beck's collection. His recently published paper dealing with *The Earthworm Fauna of the Great American Desert and Adjacent Areas*³ is based largely upon Dr. Beck's collection. In a letter to the writer (October 16, 1967) Dr. Gates comments as follows on Beck's earthworm collection and his (Gates) article referred to above. "Data from study of Beck's earthworms will be appearing from time

3. G. E. Gates, 1967. The Earthworm Fauna of the Great American Desert and Adjacent Areas. Great Basin Naturalist, Vol. 27, No. 3. pp. 142-176.

to time in various contributions, but such data will largely be incidental and not of the importance that it derives from the Great Basin collections. In a sense, then, I suppose, that this contribution will be a sort of memorial—at least to his collecting of megadriles. A second regret *re* of Beck's work is that one shipment of his earthworm material got lost somewhere (he never knew where or how) and never reached the American Museum to which he had been sending his collection. The lot or lots probably would have made the MS. even more massive."

In 1951 he received a grant from the National Institutes of Health for a study of the ectoparasites of the mammals of the western United States. Many small mammals were trapped in Utah, Arizona, and Idaho from which Beck obtained a large collection of fleas and ticks.

Dr. Beck's recognized success in mosquito control gained for him a leave from university duties 1956-1958 to serve as an adviser under the auspices of the World Health Organization on malaria mosquito control for the Chinese government in Tiawan. Mrs. Beck and some of the children accompanied him. While there, he made a lifelong friend of Dr. Hsieh, parasitologist, who is now engaged as a parasitologist at Harbel, Liberia, West Africa.

Dr. Beck was advanced to Professor of Zoology and Entomology and made chairman of the department at Brigham Young University, serving from February 1962 to June 1965. During his chairmanship new staff members were added and the department increased in enrollment and facilities.

From 1959-1966 Dr. Beck was associated with Dr. Dorald Allred, associate professor of zoology and entomology at Brigham Young University, in an ecological study at the Nevada Test Site as principal investigator 1964-66 and associate investigator 1959-64. This study was carried forward under an Atomic Energy Commission grant. The main object of the research project was to make a faunistic inventory of the test site. Many specialists have been involved in studying the specimens collected by a staff of collectors who worked under the supervision of Beck and Allred. More than 70 papers have been published dealing with the invertebrates, vertebrates, and the ecology of the test site.

Two of the papers merit comment at this time. *The Orthoptera of the Nevada Test Site*,⁴ by Andrew H. Barnum, at Dixie College, 1964, is a noteworthy contribution. In this study approximately 8,000 specimens of Orthoptera were collected and studied. Species from four of the five recognized suborders, 9 families, 41 genera, and 60 species are recognized in the study. There are 157 well-executed morphological figures, 34 distribution maps, along with keys and description to the taxa involved. This contribution of 134 pages adds greatly to the knowledge of the American Desert Orthoptera of the Great Basin. Two species of camel crickets are described as new to science.

4. Andrew H. Barnum, 1964, *Orthoptera of the Nevada Test Site*. Brigham Young University Science Bulletin; Biological Series - Vol. IV, No. 3, pp. 1-134.

The *magnum opus* of these publications is one by Dr. Harry H. Knight, entomologist at Iowa State University, Ames, Iowa. This study now in press is a *Taxonomic Review: Miridae (Hemiptera) of the Nevada Test Site and Western United States*. It is an exhaustive treatise of the mirids of the test site and the western United States. Dr. Knight has put forth great effort in dealing with the 612 species and 122 genera covered in this study. He has recognized 160 species and 50 genera as occurring on the Nevada test site; of which 3 genera and 96 species are described as new to science.

Dr. Beck is honored by Dr. Knight with the following new genus *Beckocoris laticephalus*, and five new species as follows: *Chlamydatatus becki*; *Nevadocoris becki* (this is a new genus); *Lopidea becki*; *Parthenicus becki*; and *Phytocoris becki*. This volume is dedicated to the memory of Dr. D Elden Beck.

Great credit is due Drs. Beck and Allred for the success achieved in accomplishing the main objective of the research project. Much more is now known about the fauna of the Great Basin than 10 years ago before the initiation of this project.

Dr. Beck was active in the following learned societies: Society of Sigma Xi; Utah Academy of Sciences, Arts, and Letters; American Society of Parasitologists; American Wildlife Disease Association; American Mosquito Control Association; and Utah Mosquito Abatement Association.

We should not neglect to report that Professor Beck was an avid and talented photographer. His photographic files contain more than a thousand negatives of plants, animals, and geological features, many of which have been published in national magazines.

D E. Beck was proud of his family. His 11 grandchildren were anxious to visit their grandfather and were always welcomed into the well-ordered Beck home. Elden met people easily with a ready and even voluble speech and he possessed a charm of manner that made him good company. The instinct to help others seems to have been one of Dr. Beck's most deep-seated characteristics. He went beyond a willingness to lend a sympathetic ear, to lend a hand to friends and students alike. His artistic soul drank in the beauty of the seasonal changes of mountain, stream, and valley. He was in harmony with the animate and inanimate make-up of his environment. The color of man did not wean him from the inner warmth and spirit beneath the human skin. He had an abiding faith in the justice and power of his Maker. We will miss, but long remember our colleague and friend D Elden Beck.

THE FOLLOWING COMPRISE THE PRINCIPAL ARTICLES (63)
PUBLISHED BY PROFESSOR BECK ON SCIENTIFIC SUBJECTS, 1929-1967

1929

Bees of the Sub-family *Osminae* in the collection of the BYU Zoology Dept.
Bull. Brooklyn Ent. Soc., Vol. 24, pp. 303-306, 1929.

1931

Length of the Developmental Stages of the Horn-fly *Haematobia irritans* at
Constant Temperature. *Jour. Economic Ent.*, Vol. 24, 1931.

- 1933
A Morphological Study of the Male Genitalia of Various Genera of Bees. *Proc. Utah Acad. of Sci.*, Vol. 10, pp. 89-137, 1933.
- 1935
The Place of Physiology and Hygiene in the Secondary Curriculum. *Utah Ed Review.*, Vol. 28, pp. 279-280, 1935.
- 1936
Notes on Utah Water Striders. *Proc. Utah Acad. of Sci., Arts, Lett.*, Vol. 13, pp. 203-206, 1936.
- 1937
Capitol Reef. *Utah Mag.*, Vol. 2, No. 19, pp. 6, 15, and 20, 1937.
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- 1942
Life History Notes on the California Gull, No. 1. *Great Basin Naturalist*, Vol. 3, Nos. 3-4, pp. 91-108, 1942.
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- 1943
Coyote Gulch. *Improvement Era*, Vol. 4, No. 8, pp. 462-463, 503, 1943.
California Gull - A Comparative Plumage Study. *Great Basin Naturalist*, Vol. 4, pp. 57-61, 1943.
- 1946
Down the Escalante. *Utah Mag.*, Vol. 8, No. 4, pp. 24, 34, 45, 49-50; No. 5, pp. 32-33, 48; No. 6, pp. 30, 45-47; No. 7, pp. 30-31, 42, 44; No. 8, pp. 30-31, 33, 36-37; No. 9, pp. 30-31, 43-44. (Booklet run as a serial, 1946.)
- 1947
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- 1949
Provo, Centennial Booklet. (Editor, and feature articles author) Published by Provo City, Lorraine Press Printers, Salt Lake City, Utah, pp. 1-75, 1949.
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- 1953
Mite Fauna of Woodrat Nests in Utah. *Proc., Utah Acad. Sci., Arts, Lett.*, Vol. 30, pp. 53-56, 1953. Junior co-author with Dorald M. Allred.
Arthropod Consortes Found in the Nests of *Neotoma cinera acraia* (Ord) and *Neotoma lepida lepida* Thomas. *Proc., Utah Acad. Sci., Arts, Lett.*, Vol. 30, pp. 43-52, 1953. Senior co-author with A. H. Barnum and Lenard Moore.
A Study of Some Consortes Found at a Nesting Site of the Northern Cliff Swallow *Petrochelidon albifrons albifrons* (Rafinesque). *Proc., Utah Acad. Sci., Arts, Lett.*, Vol. 30, pp. 39-42, 1953.
A New Species of *Acomatacarus* (Acarina, Trombiculidae) from Utah. *Great Basin Naturalist*, Vol. 13, Nos. 3-4, 1953. Junior co-author with Dorald M. Allred.
Plague, Plague Distribution and Plague Vectors in Utah. *Seventieth Annual Sigma Xi Address. BYU Chap. Proc.*, 1953.
- 1954
Ecological and Distributional Notes on Some Utah Hirudinea. *Proc., Utah Acad. Sci., Arts, Lett.*, Vol. 31, pp. 73-78, 1954.
Distributional Records of Some Aquatic Coleoptera in Utah. *Proc., Utah Acad. Sci., Arts, Lett.*, Vol. 31, pp. 52-56, 1954.
Distributional and Natural History Notes on *Polycelis coronata* in Utah. *Proc., Utah Acad. Sci., Arts, Lett.*, Vol. 31, pp. 79-82, 1954.
- 1955
Potential and Capable Vectors of Rocky Mountain Spotted Fever and Plague in Utah. *BYU Sci. Bull., Biological Series*, Vol. 1, No. 1, pp. 1-64, February, 1955.

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- The Chiggers of Utah (Acarina: Trombiculidae). *Great Basin Naturalist*, Vol. 15, Nos. 1-4, pp. 1-26, 1955. Junior co-author with James M. Brennan.
- Seasonal Study of the Tick, *Ornithodoros hermsi* found in nests of the Desert Wood Rat, *Neotoma lepida lepida* in Utah. *Proc., Utah Acad.*, Vol. 32, pp. 131-135, 1955. Senior co-author with Dorald M. Allred.
- 1957
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Ticks of the genus *Ixodes* in Utah. *BYU Sci. Bull., Biological Series*, Vol. 1, No. 4, pp. 1-42, 1960. Junior co-author with Dorald M. Allred and L. D. White.
- Mosquito Survey of Central Utah Valley, Utah. *Proc., Thirteenth Annual Meeting of the Utah Mosquito Abatement Assoc.*, 1960.
- Central Utah County Mosquito Survey Studies. *Mosquito News*, Vol. 21, No. 1, pp. 6-11, 1960.
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- 1962
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- 1963
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